

With the availability of 3Phase power becoming common, the use of 3Phase AC Squirrel cage motor became very common & demand increased for motors with single phase power, as the current in single phase is a concern, hence motors upto 3Hp have been made In Single phase power with the same Induction design principle.

The issue of Starting of the motor with Single phase was tackled by providing Capacitor for creating phase difference. The simplicity in operation & immediate torque made it a common motor for single phase power.

This Model is the Industrial/Educational model suitable for demonstrating to students the complete know of the Basics, Components, Starting methods, Wear & Tear & Maintenance of these motors packaged in small rating.

Students can make connections of their own with the help of the terminations provided for study of features viz Starting methods, Speed-Torque, Effect of Phase angle, Study of Cogging/Crawling, Effect of reduced voltage, Blocked rotor test.

Technical Specs :

Power ratings available : 350W / 750W / 1KW / 1.5KW

Voltage Input: 230V AC 50hz

RPM: 1440 / 2880 RPM

Single / Double shaft extension, TEFC, IP44, IC01, B3, Class-B, S1, Casting/Sheet metal body



List of Experiments

- 1) Starting by DOL Starter
- 2) Starting by reduced voltage starter.
- 3) Load test & No load test of machine
- 4) Speed-Torque Analysis
- 5) Voltage-Speed Analysis
- 6) Speed reversal
- 7) Efficiency Analysis
- 8) Blocked rotor test
- 9) Cold Resistance & Hot Resistance
- 10) Motor Operation parameters
- 11) Basic Overhauling Know how

Note: Specifications are subject to change.

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